Remarks

In the Office Action mailed July 13, 2006:

1. Claims 1-6, 9-12, 52, 54, 57-58 and 63 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,367,517 (Cidon) and U.S. Patent No. 6,597,662 (Kumar);
2. Claims 8, 53 and 59-61 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Cidon and Kumar, in view of U.S. Patent No. 6,934,752 (Gubbi);
3. Claims 32, 35-37, 41, 47, 49 and 65 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Cidon and Kumar, in view of U.S. Patent No. 6,046,983 (Hasegawa);
4. Claims 33-34 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Cidon, Kumar and Hasegawa, in view of Gubbi;
5. Claims 40, 44 and 46 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Cidon, Kumar and Hasegawa, in view of U.S. Patent Publication No. 2002/0071450 (Gasbarro);
6. Claims 42-43, 45 and 48 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Cidon, Kumar and Hasegawa, in view of U.S. Patent No. 6,937,580 (Heatwole); and
7. Claims 13-22, 26-30 and 31 were allowed.

I Hasegawa (U.S. Patent No. 6,046,983)

Hasegawa is directed toward a Dynamic Rate Control System (title) for an ATM (Asynchronous Transfer Mode) network.

A. Hasegawa Does Not Teach Allocating to a Channel a Bandwidth Higher than a Target Bandwidth

In claimed embodiments of the invention, a communication dispatched from a source node to a destination node includes a modifiable value and a fixed value representing bandwidths for a communication channel between the source and destination nodes. The bandwidth represented by the fixed value can never be less than the modifiable value because the fixed value represents the source node's desired or optimal bandwidth for the channel. The modifiable

value represents a target bandwidth that may be adjusted by relay elements (e.g., switches) to reflect how much bandwidth they can actually allocate to the channel.

In an implementation of this embodiment, a first relay element or intermediate node receives the communication, allocates a bandwidth lower than the target bandwidth to the communication channel and modifies the modifiable value accordingly to reflect the lowered target bandwidth. Subsequently, a second relay element downstream of the first relay element receives the communication but allocates to the communication channel a bandwidth *higher* than the lowered target bandwidth.

Figures 55-56 of Hasegawa were cited as making this aspect of Applicant's invention obvious. Applicant traverses. Figures 55-56 of Hasegawa are described in the Background section of the Hasegawa reference, for example at column 3, line 11 to column 4, line 51. Please note that this portion of Hasegawa appears to duplicate column 1, line 36 to column 3, line 10.

Figure 55 is a flowchart describing the operation of a source-side terminal implementing an ABR (Available Bit Rate) protocol in an ATM network, and shows that the terminal may increase or decrease the ACR (Allowed Cell Rate) of its communications based on whether a returned RM (Resource Management) cell reports congestion in the network (column 3, line 47; column 1, lines 30-31; column 4, lines 10-14).

Figure 56 is a flowchart of describing the operation of source-side and destination-side switches in the same network (e.g., column 3, lines 16-23), and shows that a switch cooperates in the processing of a RM cell by writing into the cell an ACR value that is acceptable to that switch (column 4, lines 15-20).

Thus, Hasegawa describes how a source terminal may adjust its communication rate based on a switch's indication of congestion, but does not teach or disclose having a downstream switch allocate to a channel a bandwidth higher than a target bandwidth assigned by an upstream switch. In particular, in order for Hasegawa to make this aspect of Applicant's invention obvious, it would have to suggest having a downstream switch select or write into an RM cell an ACR that is higher than an ACR set by an upstream switch. Hasegawa does not do this.

II Selected Claims

A. Claims 1-6, 8-11, 12 & 65

Claims 1 and 12 have been amended to reflect a relay element's determination of whether bandwidth is available for a channel between two entities. If the relay element cannot support even the target bandwidth for the channel, the relay element decreases that target bandwidth.

In claim 65, a downstream relay element allocates to a channel a bandwidth *higher* than a target value set by an upstream relay element. As described above in Section I.A, Hasegawa does not teach or suggest this.

Claims 3-5 have been cancelled without prejudice.

B. Claims 32-37, 40-48, 49

In claims 32 and 49, a downstream intermediate node allocates to a channel a rate of communication higher than a previously set target rate if the downstream node has sufficient bandwidth. The Examiner stated (page 17, second paragraph) that neither Cidon nor Kumar teaches this. As described above in Section I.A, Hasegawa also fails to teach or disclose this.

C. Claims 52-55

Claims 52-55 have been cancelled without prejudice.

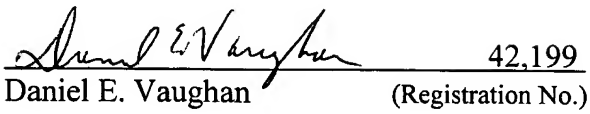
D. Claims 57-63

In claim 57, a processor allocates to a channel a bandwidth equal to or greater than a target bandwidth indicated by a modifiable value. This aspect of claim 57 was not addressed in the office action. However, the Examiner has acknowledged that neither Cidon nor Kumar teaches this aspect of Applicant's invention and, as described above in Section I.A, neither does Hasegawa.

CONCLUSION

No new matter has been added with the preceding amendments. It is submitted that the application is in suitable condition for allowance. Such action is respectfully requested. If prosecution of this application may be facilitated through a telephone interview, the Examiner is invited to contact Applicant's attorney identified below.

Respectfully submitted,

Date: August 15, 2006 By:  42,199

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